

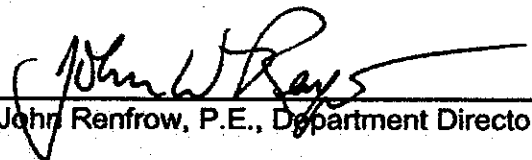


# **Miami-Dade Water and Sewer Department Business Plan**

**Fiscal Years: 2007 through 2008**  
(10/1/06 through 9/30/08)

**November 30, 2006**

Approved by:

  
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168997

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## **EXECUTIVE SUMMARY**

### **Summary of Department Description**

Miami-Dade Water and Sewer Department (MDWASD) principal responsibilities are to provide potable water and wastewater services. This includes water transmission, treatment, and distribution; and wastewater collection, treatment, and disposal.

The Department is one of the largest public utilities in the United States; and currently serves more than 407,000 retail water customers and 322,000 retail sewer customers. In addition, wholesale water service is provided to 15, and wholesale sewer service to 12, of Miami-Dade County's 36 municipalities and sewer service to Homestead Air Reserve Base. In terms of population this represents about 2.2 million residents.

The Department operates three regional water treatment plants (WTPs) and five smaller plants, with a total rated treatment capacity of 452 million gallons per day (MGD). The Department also operates three regional wastewater treatment plants (WWTPs), with a total rated capacity of 368 MGD. In addition to the treatment plants, the Department operates and maintains:

- 94 water supply wells in the Biscayne Aquifer, grouped in 14 wellfields
- 5 aquifer storage and recovery (ASR) wells, in the Floridan Aquifer
- 1,006 sewer pump stations
- 7,253 miles of water distribution pipes
- 5,886 miles of sewer collection pipes

**Departmental Business Plan and Outlook**

**Department Name: Miami-Dade Water and Sewer Department**

**Fiscal Years: 2006/2007 – 2007/2008**

**The following is a summary of the major programs, initiatives, and milestones anticipated for FY07 and FY08:**

- Obtain a 20 year Consumptive Use Permit (CUP) to meet projected water demands.
- Continue Implementation of the 2003 Water and Wastewater Facilities Master Plans.
- Continue implementation of South District Wastewater Treatment Plant Florida Department of Environmental Protection (FDEP) Consent Order, including high level disinfection (HLD).
- Continue to work with Florida Department of Environmental Protection (FDEP) to obtain approval for the 2003 Wastewater Facilities Master Plan, as a requirement to obtain State Revolving Fund (SRF) low interest loans.
- Select the contractor to build the South Miami Heights new water treatment plant to serve south Miami-Dade County.
- Upgrade the Hialeah/Preston Water Treatment Plants to provide surface water treatment with funding from the rock mining fee.
- Complete groundwater studies at the South and North District Wastewater Treatment Plants.
- Advance critical rehabilitation projects at three water plants and three wastewater plants by expediting selection of plant engineering through formal professional selection process.
- Improve the New Business Section customer service rating by expediting the execution of water and sewer service agreements and creating a "one point of contact" service desk operation.
- Complete implementation of the Enterprise Resource Planning (ERP) integrated financial system.
- Continue Implementation of 2006 Florida Sterling Feedback recommendations and opportunities for improvement in order to improve the performance of the organization.
- Reorganize the Department to improve efficiency and accountability. Establish clear lines of authority, responsibility, and accountability.
- Continue Implementation of efficiency savings, process improvements, and the Partnership Optimizing WASD's Efficiency and Reengineering (POWER) Program.

**Departmental Business Plan and Outlook**

**Department Name: Miami-Dade Water and Sewer Department**

**Fiscal Years: 2006/2007 – 2007/2008**

**Summary of Critical Success Factors**

- Ability to maintain adequate revenues to meet demands.
- Ability to obtain regulatory approvals and maintain regulatory compliance.
- Ability to obtain approval of CUP to meet water supply demands.
- Ability to respond to natural and unnatural disasters, such as hurricanes, flooding, droughts, security breaches, and other disasters.

## **DEPARTMENT PURPOSE/MISSION**

### **Vision Statement**

The Miami-Dade Water and Sewer Department will be a utility that is a leader in providing public health protection and environmentally sound and innovative utility services using state-of-the-art technologies, proven operational expertise, resource planning and excellent customer service in a cost-effective manner.

### **Mission Statement**

The Miami-Dade Water and Sewer Department is committed to serving the needs of Miami-Dade County residents, businesses, and visitors by providing high-quality drinking water and wastewater disposal services while providing for future economic growth via progressive planning; implementing water conservation measures; safeguarding public health and the environment; and providing for continuous process improvements and cost efficiencies.

Additional departmental information can be found in the Departmental Profile (Attachment 1 on page 16).

## **STRATEGIC ALIGNMENT**

The Department's efforts align with the following Miami-Dade County Strategic Plan Goals:

- NU-2 Empower the community by increasing communication and coordination with local, state, and federal entities.
- NU-3 Promote responsible stewardship of natural resources and unique community environment.
- NU-6 Provide timely and reliable public infrastructure services including road maintenance storm water, solid waste and wastewater management, and a safe and clean water delivery system consistent with the Comprehensive Development Master Plan (CDMP).
- ES-5 Attract, develop and retain an effective, diverse and dedicated team of employees.
- ES-8 Ensure the financial viability of the County through sound financial management practices.
- ES-9 Deliver on promises and be accountable for performance.

Department-related Strategic Plan Outcomes and departmental objectives:

- **NU-2.2** Enhance community access to information and customer service delivery.
  - Enhance community access to information and customer service delivery
  - Advance agreements with water & wastewater municipal wholesale customers
- **NU-3.1** Ensure adequate supply of drinking water to meet demand
  - Obtain 20 yr water allocation permit to meet demands
  - Prevent and reduce wasteful use of water resources
- **NU-3.2** Restoration of County construction projects site areas to original conditions in a timely manner
  - Improve clean-up after construction projects
- **NU-6.2** Reduction in sewage overflows and provisions to unconnected commercial corridors, protection of water quality and improved water pressure
  - Reduce Sanitary Sewage Overflow (SSOs)
  - Protect water quality and improve water pressure
  - Prioritize water and sewer infrastructure capacity improvements and Capital Improvement Projects (CIP)
  - Comply with regulatory requirements for water and wastewater systems

## **Departmental Business Plan and Outlook**

**Department Name: Miami-Dade Water and Sewer Department**

**Fiscal Years: 2006/2007 – 2007/2008**

- **NU-6.3** Improve public infrastructure level-of-services
  - Improve communication and level-of-service to meet residential and industrial development demands
- **ES-5.2** Motivated, dedicated workforce team aligned with organizational priorities
  - Improve quality of workplace environment (Employees satisfaction, health, safety, security and ergonomics)
- **ES-5.3** Workforce skills to support County priorities (e.g. leadership, customer service, fiscal problem-solving, technology, etc.)
  - Provide education and training to develop and efficient and flexible workforce
- **ES-8.1** Sound asset management & financial investment strategies
  - Ensure capital funds are properly and timely expended
  - Provide timely and accurate financial information
  - Meet Budget targets
- **ES-9.5** Continuously improving government
  - Continue to implement Efficiency Projects
  - Pursue Sterling Journey



## **KEY PROGRAMS AND INITIATIVES**

The department's key programs and initiatives are highlighted below and organized by balanced scorecard perspective.

### **Customer Perspective**

- Provide wastewater collection, treatment, and disposal to more than 322,000 retail customers.
- Provide water transmission, treatment, and distribution to more than 407,000 retail customers.
- Provide quality customer service to the more than 407,000 customers.
- Obtain 20 Year Consumptive Use Permit (CUP) to meet projected water demands.
- Improve the New Business Section customer service rating by expediting the execution of water and sewer service agreements and creating a "one point of contact" service desk operation.
- Improve the plans review operation by expediting preliminary water and sewer plans (dry-run) review and final water and sewer plans approval.
- Reduce customer call waiting times and improve overall customer service.
- Integrate Customer Information System (CIS) and 311 functions.
- Enhance electronic services to better meet customer needs, by providing additional services via enhanced links on the Internet; and enhance electronic bill pay and presentment (EBPP) services to meet customer demands for electronic bill payment.
- Maintain and improve relations with wholesale customers through scheduled meetings and continuous communications.
- Develop a systematic approach to collect and analyze customer complaints, satisfaction and dissatisfaction data.
- Follow-up with the 2006 Customer Service Survey Results; and implement two additional customer surveys that will target customers that have contacted the Department for a customer service billing issue and the other survey will address the needs of wholesale customers.

**Departmental Business Plan and Outlook**  
**Department Name: Miami-Dade Water and Sewer Department**  
**Fiscal Years: 2006/2007 – 2007/2008**

- Implement intensive customer service training module to improve service delivery to customers.
- Reduce customer service issues and questions by improving field operations.
- Prepare an implementation plan for monthly billing.
- Select a consultant to evaluate and recommend the best and most cost effective method to implement automated meter reading.

**Financial Perspective**

- Provide financial accounting and reporting services for the Department.
- Provide billing services to various municipalities for storm water services.
- Complete Rate Study for wholesale and retail customer rates.
- Implement Enterprise Asset Management System (EAMS).
- Pursue the annual Certificate program for the Department's Comprehensive Annual Financial Report (CAFR).
- Continue implementation of efficiency projects and process improvements through the Partnership Optimizing WASD's Efficiency and Reengineering (POWER) Program.
- Provide stable and enhanced operation of the PeopleSoft Enterprise Resource Planning (ERP) System.
- Develop and improve a Capital Planning Process.

**Internal Perspective**

- Maintain all the water and wastewater treatment plants, pump stations, and other facilities.
- Update the Water and Wastewater Facilities master plans.
- Design, construct, and inspect projects required to provide adequate levels of service.
- Initiate and implement Miami-Dade County's first major in-house program management initiative to handle Building Better Communities General Obligation Bonds/Needs Assessment Program (GOB/NAP) projects.
- Expand in-house program management to cover multiple programs, including Pump Station Improvement Program (PSIP), GOB, and NAP.

## **Departmental Business Plan and Outlook**

**Department Name: Miami-Dade Water and Sewer Department**

**Fiscal Years: 2006/2007 – 2007/2008**

- Implement an in-house business process analysis to determine best business practices in order to implement Project Control Tracking System (PCTS).
- Apply for federal and state financial assistance for water and sewer capital improvements.
- Expand Geographical Information System (GIS) to include right-of-way projects from other agencies for better coordination and to minimize impact to the public.
- Implement a pilot program to investigate the conflicts between road projects and MDWASD's valves and infrastructure.
- Continue to implement Pump Station Improvement, Infiltration and Inflow Reduction, Leak Detection, Water Conservation, Effluent Reuse, Wastewater Residuals Reuse, Lateral Pilot, Pump Station Optimization, Cross-Connection Control, Backflow Prevention, Sanitary Sewer Evaluation Surveys, Pumps Out-of-Service, Valve Exercise, and flushing of pipe programs and/or initiatives.
- Reactivate the Medley Well filed as an emergency standby to supply plants at Hialeah and Preston Water Treatment Plants.
- Maintain dedicated functional and technical support for mission critical applications.
- Provide Information technology support for the Department.
- Continue to Implement the Consent Decree/Settlement Agreement (CD/SA) Program Management.
- Provide environmental compliance monitoring and maintain all federal and state operating permits in good standing.
- Provide input to various federal and state agencies in the development of new regulations.
- Improve relations and frequent contact with all regulatory bodies that affect the Department.
- Expand technology to accomplish departmental goals.
- Provide input for improvements to the Customer Information System (CIS).
- Provide reliable network services to enable maximized systems response, access, and use.
- Review and update rules and regulations to ensure appropriate levels of customer service.

## **Departmental Business Plan and Outlook**

**Department Name: Miami-Dade Water and Sewer Department**

**Fiscal Years: 2006/2007 – 2007/2008**

- Develop a systematic and standard approach to monitor and improve internal processes.
- Develop a systematic approach to identify, manage, and share best practices within the Department.
- Reorganize the Department to improve efficiency and accountability. Establish clear lines of authority, responsibility, and accountability; ensure appropriate resources are allocated to provide water and sewer services; and ensure the Department is meeting all regulatory requirements.
- Prepare a Strategic Plan for the Department.
- Implement the meter change out and periodic testing of meters.
- Develop the Comprehensive Security Access Control Program.
- Develop the Comprehensive Security Standard Operating Procedures.
- Continue initiatives related to the development and participation of multi-agency security operations, intelligence gathering, and security monitoring activities at all facilities.
- Expand quality assurance review of department.
- Implement audit recommendations from Audit and Management Services and Office of the Inspector General.
- Maintain Infrastructure Improvement Projects (IIE) layer to reflect engineering projects.
- Expedite improvements and expansions of all water sludge storage/drying lagoons.
- Complete the Biosolids Master Plan update, Odor Control, and Reuse Feasibility Study.
- Complete the in-house design of the Floridan Aquifer water supply wells to be used for blending at the Hialeah/Preston Water Treatment Plant.
- Reduce warehouse inventory by reviewing slow moving/obsolete inventory.

### **Learning and Growth Perspective**

- Continue to develop a comprehensive employee training and development program.
- Continue to develop a Comprehensive Safety Program, including the organization and empowerment of Site Safety Teams, establishment of the Safety Rescue Training Center and the Employee Injury Prevention Program.

**Departmental Business Plan and Outlook****Department Name: Miami-Dade Water and Sewer Department****Fiscal Years: 2006/2007 – 2007/2008**

- Develop a systematic approach to collect and analyze employee satisfaction and dissatisfaction data, including an employee survey.
- Develop a systematic approach to succession planning.
- Continue to fully implement performance management system (Using ASE) at every level.
- Continue to benchmark performance and include comparative data in the analysis and reporting of performance results.

**PERFORMANCE MEASURES AND TARGETS**

For ease of reference, specific information regarding departmental objectives and performance measures including the targets for FY 2006-07 and FY 2007-08 can be found in Attachment 2 – Business Plan Report.

## **CRITICAL SUCCESS FACTORS**

The following is a brief list of issues which are critical to the successful implementation of this Business Plan:

- Ability to obtain support and appropriate funding level to comply with regulatory requirements, including the 20 Year Consumptive Use Permit, operational permits for water supply projects, Wastewater Facilities Master Plan, and construction permits for Wastewater Phase I projects, and wet weather treatment facilities.
- Ability to maintain adequate revenues to meet the financial obligations and implement the Multi-Year Capital Plan (MYCP) and a reasonable level of Replacement and Renewal (R&R).
- Ability to hire qualified staff and consultants expeditiously in a timely fashion to implement programs and initiatives.
- Ability to effectively stage acquisitions, annexations, and transfer of accounts from other municipalities.
- Ability to effectively source systems implementations and operations and ETSD to provide reliable, responsive service.
- Ability to respond to natural and unnatural disasters, such as hurricanes, flooding, droughts, security breaches, and other disasters.

## **3 to 5 YEAR OUTLOOK**

The following are future year task/activities/programs required to achieve Strategic Plan objectives

- Implement the Water and Wastewater Facilities Master Plans, which are part of the MYCP.
- Improve of the Water Conservation Program to enhance water availability.
- Expand the Aquifer Storage Recovery Program.
- Continue to implement alternate water supplies, including reuse.
- Seek an adequate revenue stream, which is critical to the success of the Department to maintain proper reserves and meet debt service coverage in accordance with the Master Bond Ordinance (93-134).
- Manage restricted assets so that funds are spent timely.







**Departmental Business Plan and Outlook**

**Department Name: Miami-Dade Water and Sewer Department**

**Fiscal Years: 2006/2007 – 2007/2008**

- Complete the Department's Reorganization and seek approval for recommended staffing levels.
- Continue to expedite implementation of identified renewal and replacement needs, and benchmark with other utilities.
- Increase implementation of new technologies.
- Increase high level management support and buy into process.
- Obtain regulatory approval for additional wastewater disposal during wet weather conditions.
- Implement a Mobile Workforce Management System.
- Continue enhancements to in-house program management of Capital Improvement Plan to correlate with the Mayor and BCC mandate of reducing the use of consultants
- Improve the efficiency and timeliness of projects by implementing project management strategy and utilizing project management software.
- Initiate a program to empty the existing calcium carbonate from the water treatment process from existing lagoons and the construction of new lagoons.
- Develop an Electronic Plans Processing and Approval System within the next three (3) to five (5) years. MDWASD will complete implementation or enhancement of IT (information technology) systems that can support, measure and track the activities of the core functions of the organization. These systems include: Customer Information System (CIS); Enterprise Resource Planning (ERP); Enterprise Asset Management (EAM); Project Control and Tracking (PCTS); and the Geographical Information System (GIS). All systems will be functioning at an integrated level so as to provide data that can be used to trend, plan, and budget more effectively.
- Integrate the access of data and enabling technologies. Network infrastructure and operations security and reliability; telecommunications consolidation and control; secure wireless infrastructure; and mobile operations deployed and managed to the benefit of this goal. Close operational interface to ETSD requiring strict adherence to service level agreements (SLA) will be required.
- Centralize all purchasing activities from eight locations.

***Attachment 1***

**DEPARTMENTAL PROFILE**

**Department Description**

In December 1972, the Board of County Commissioners (the Board) of Miami-Dade County, Florida (the County) created the Miami-Dade Water and Sewer Authority (the Authority) for the purpose of establishing an agency responsible for providing water and wastewater services throughout the County. In 1973, all properties of the water and wastewater systems of the City of Miami and of the County were placed under the control of the Authority. The Board changed the status of the Authority to that of a County department effective November 1, 1983. Under the provisions of Miami-Dade County Ordinance 83-92, which directed the transition, the Authority was established as the "Miami-Dade Water and Sewer Authority Department ("the Department")." On October 19, 1993, the Department changed its name to the Miami-Dade Water and Sewer Department. The principal responsibilities of the Department are water transmission, treatment, and distribution; and sewer collection, treatment, and disposal.

The Department is ranked as the sixth largest public utility in the United States, and currently serves more than 407,000 retail water customers and 322,000 retail wastewater customers. In addition, wholesale water service is provided to 15, and wholesale sewer service to 12, of Miami-Dade County's 36 municipalities and sewer services to Homestead Air Force Base. In terms of population this represents about 2.2 million residents.

The Department provides high-quality drinking water and wastewater disposal services, while planning for future growth, implementing water conservation measures, safe guarding public health and the environment, and providing for process improvements and cost efficiencies. The department's main functions are water transmission, treatment, and distribution, as well as wastewater collection, treatment, and disposal.

The Department operates three regional water treatment plants (WTPs): the Hialeah, Preston and Alex Orr, Jr, WTPs; and five smaller plants in the southern part of the County, with a total rated treatment capacity of 452 million gallons per day (MGD). The water supply for these plants comes from the Biscayne Aquifer through 94 water supply wells, located in 14 separate wellfields. The regional plants use lime softening and disinfection with chlorine as the principal treatment. In addition, at the West and Southwest wellfields, aquifer storage and recovery (ASR) wells are used to store excess water in the wet season and the water is recovered in the dry season to supplement the higher demands. The water distribution system consists of 7,253 miles of pipes.

The Department also operates three regional wastewater treatment plants (WWTPs): the North, Central, and South District WWTPs; with a total rated capacity of 368 MGD. The North and Central District WWTPs discharge the treated wastewater through deep ocean outfalls and the South District WWTP uses deep injection wells. At the North District WWTP four injection wells have been constructed and are undergoing operational testing. The three

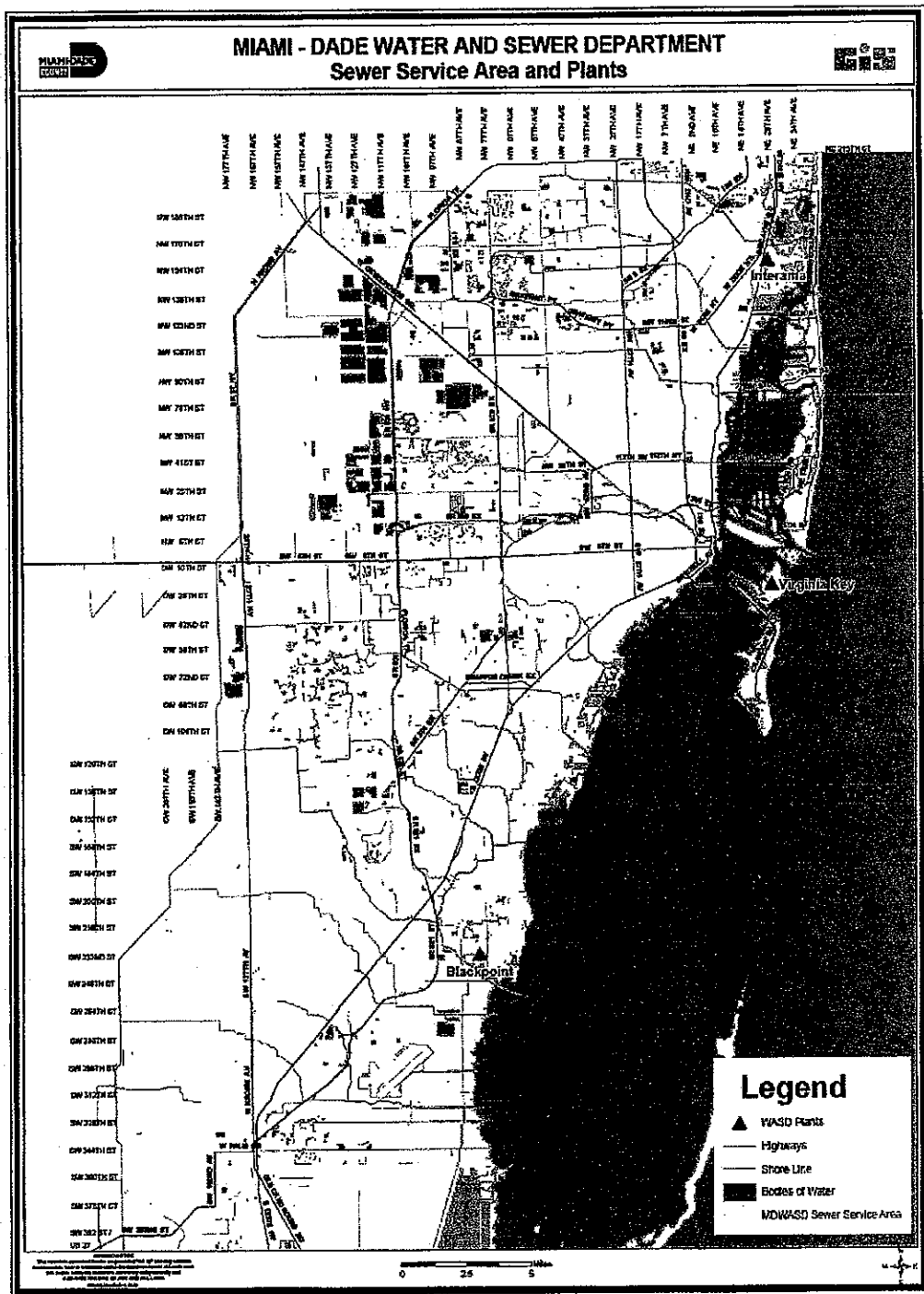
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WWTPs treat the wastewater to secondary treatment standards and part of the treated effluent is used for process water or further treated to use for irrigation within the treatment plant. At the North District WWTP, about 100,000 gallons of wastewater per day are treated to tertiary treatment levels and used for irrigation of the Florida International University North Campus. The wastewater collection system consists of 1,006 sewer pump stations (987 County-owned and 19 maintained for other entities) and 5,886 miles of sewer collection pipes.

The location of the WTPs and WWTPs and the corresponding service areas are shown on the following pages.

**Fiscal Years: 2006/2007 – 2007/2008**

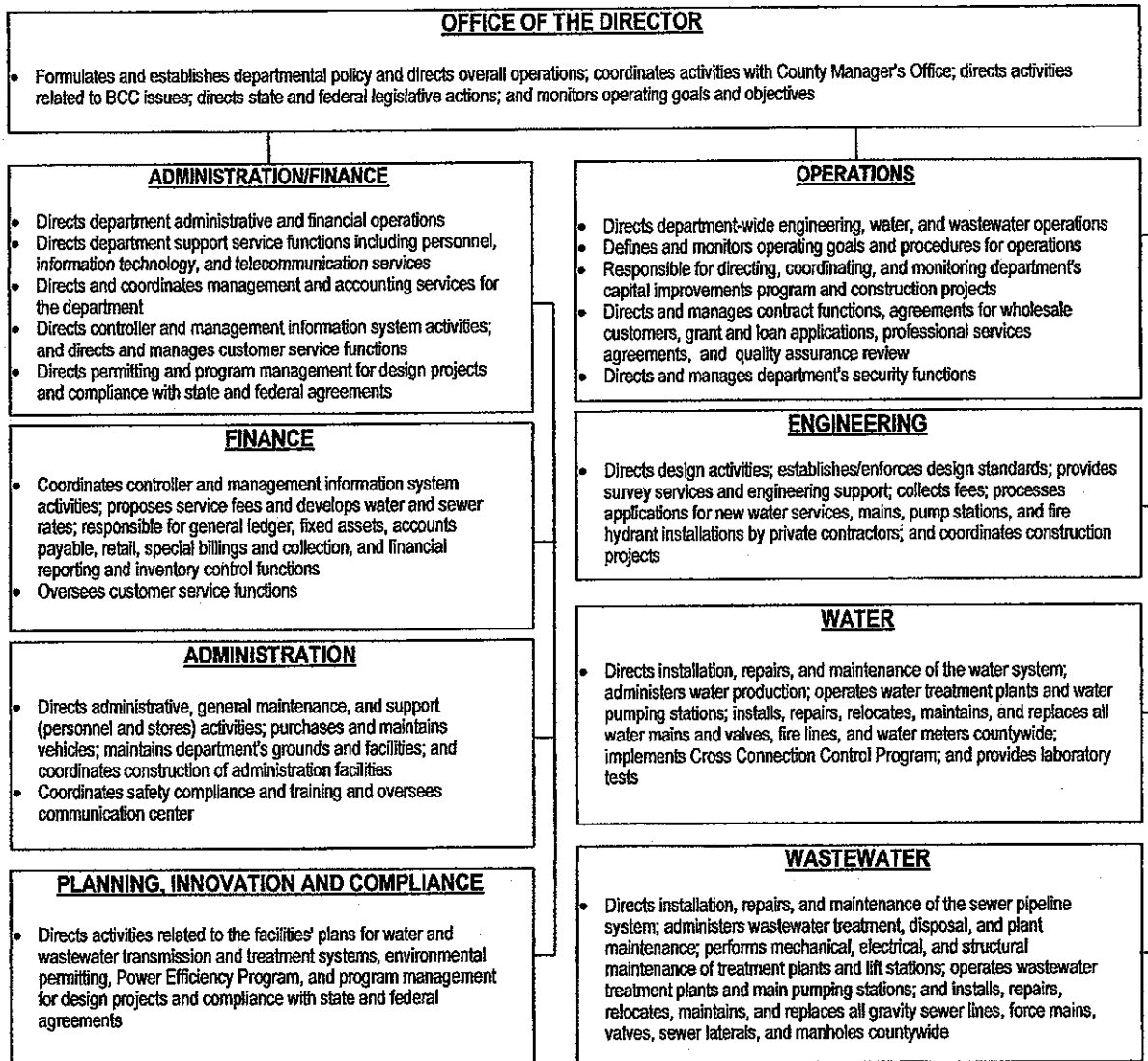
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**Departmental Business Plan and Outlook**  
**Department Name: Miami-Dade Water and Sewer Department**  
**Fiscal Years: 2006/2007 – 2007/2008**

**Water and Sewer**

**TABLE OF ORGANIZATION**



**Departmental Business Plan and Outlook**  
**Department Name: Miami-Dade Water and Sewer Department**  
**Fiscal Years: 2006/2007 – 2007/2008**

**MIAMI-DADE WATER AND SEWER DEPARTMENT**  
**Departmental Business Plan**  
**FY 2005/2006 - FY 2006/2007**

<u>Staffing Chart</u>	FY 2005/2006		FY 2006/2007	
	Positions	Budget	Positions	Budget
<b>OFFICE OF THE DIRECTOR'S OFFICE</b>	3	\$ 651,394	4	\$ 1,348,486
County Attorneys*	5	758,634	4	487,390
Public Affairs	5	422,081	6	403,077
Assistant Director-Legislative Affairs and Executive Assistant	22	1,922,786	24	2,094,476
*Corporate (fringes previously in fringe rate applied to divisions)	-	-	-	4,761,700
<b>DEPUTY DIRECTOR - ADMINISTRATION/FINANCE</b>	-	-	2	182,448
<b>OFFICE OF ASSISTANT W &amp; S DIRECTOR</b>				
- FINANCE	22	1,929,734	6	614,715
Budget Management Section	8	762,044	9	754,083
Business Process Section	-	-	16	1,101,891
Controller Division	138	8,189,772	139	8,138,339
Data Processing Division	67	7,049,185	71	7,011,256
Customer Service Division	274	16,186,946	274	15,820,001
<b>OFFICE OF ASSISTANT W &amp; S DIRECTOR</b>				
- ADMINISTRATION	2	308,795	2	280,856
Human Resources Section	32	2,440,389	32	2,374,661
Support Services Section	27	1,366,933	28	1,347,163
Stores/Procurement Section	82	5,240,574	83	5,128,900
Communications Center	25	1,528,789	25	1,492,077
General Maintenance Division	148	11,893,733	155	11,536,248
<b>OFFICE OF ASSISTANT W &amp; S DIRECTOR</b>				
- PLANNING, INNOVATION AND COMPLIANCE	3	393,079	3	294,953
Permitting Section	5	404,908	5	405,295
Planning Section	7	646,460	7	659,098
POWER/Efficiency Section	5	371,956	5	359,244
Project Support Section	17	1,423,301	17	1,421,405
Consent Decree/Settlement Agreement	16	1,817,936	16	1,582,882
<b>DEPUTY DIRECTOR - OPERATIONS</b>	11	1,031,694	11	1,267,952
Security Section	4	345,816	5	502,639
<b>OFFICE OF ASSISTANT W &amp; S DIRECTOR</b>				
- ENGINEERING	2	258,637	3	407,769
Engineering Division	160	13,588,684	168	13,573,564
Utilities Development Division	111	7,730,497	117	7,846,001
Capital Improvement Division	-	-	1	39,548
<b>OFFICE OF ASSISTANT W &amp; S DIRECTOR</b>				
- WATER	2	595,059	2	227,869
Laboratory Section	50	3,414,478	52	3,277,309
Meter Section	113	6,357,706	118	6,294,735
Water Distribution Division	228	15,267,969	235	15,068,412
Water Production Division	100	7,188,387	123	7,766,733
<b>OFFICE OF ASSISTANT W &amp; S DIRECTOR</b>				
- WASTEWATER	2	242,321	2	234,820
Plant Maintenance Division	336	28,472,264	343	26,412,077
Sewer Collection Division	193	12,254,056	201	11,540,226
Pump Station Maintenance Division	209	16,052,692	213	15,536,320
Wastewater Treatment Division	170	12,093,651	175	11,421,893
<b>TOTAL</b>	<b>2,604</b>	<b>\$ 190,343,350</b>	<b>2,702</b>	<b>\$ 191,097,421</b>

\* FY 2006/2007 Budget for Corporate includes fringes such as Workman's Compensation, Long Term Disability Insurance and Unemployment Insurance previously included in the fringe rate allocated to divisions.

**Departmental Business Plan and Outlook**  
**Department Name: Miami-Dade Water and Sewer Department**  
**Fiscal Years: 2006/2007 – 2007/2008**

**FINANCIAL SUMMARY**

(Dollars in Thousands)	Actual FY 04-05	Budget FY 05-06	Budget FY 06-07
<b>Revenue Summary</b>			
Carryover	37,538	43,682	48,812
Delinquency, Billing, and Service Charges	8,844	8,386	8,974
Fire Protection and Fire Hydrant Fees	4,339	4,224	4,404
Maintenance Fees	190	176	193
Miscellaneous Non-Operating Revenue	14,132	11,124	13,491
Miscellaneous Revenues	3,601	3,253	3,655
Septic Tanks and High Strength Sewage	2,599	2,644	2,637
Transfer From Other Funds	27,454	77,742	36,294
Wastewater Revenue	212,128	209,526	233,314
Water Revenue	160,259	174,072	196,279
<b>Total Revenues</b>	<b>471,084</b>	<b>534,829</b>	<b>550,053</b>
<b>Operating Expenditures Summary</b>			
Salary	97,799	97,600	101,149
Fringe Benefits	54,321	54,147	54,591
Other Operating	106,260	141,120	163,707
Capital	26,039	0	58,612
<b>Total Operating Expenditures</b>	<b>284,419</b>	<b>292,867</b>	<b>378,059</b>
<b>Non-Operating Expenditures Summary</b>			
Debt Service	115,282	123,521	118,753
Reserve	0	48,812	53,241
Transfers	0	64,030	0
Other Non-Operating Adjustments	0	5,599	0
<b>Total Non-Operating Expenditures</b>	<b>115,282</b>	<b>241,962</b>	<b>171,994</b>

(Dollars in Thousands)	Total Funding Budget FY 05-06	Total Funding Budget FY 06-07	Total Positions Budget FY 05-06	Total Positions Budget FY 06-07
<b>Expenditure By Program</b>				
<b>Strategic Area: Neighborhood and Unincorporated Area Municipal Services</b>				
Administration	169,945	178,070	365	382
Engineering and Construction	4,933	4,625	268	289
Finance and Customer Service	25,808	27,656	509	514
Planning, Innovation and Compliance	1,956	2,276	53	53
Wastewater Collection and Treatment	54,948	97,750	913	934
Water Production and Distribution	35,277	67,682	496	530
<b>Total Operating Expenditures</b>	<b>292,867</b>	<b>378,059</b>	<b>2,604</b>	<b>2,702</b>

**CAPITAL BUDGET SUMMARY**

(Dollars in Thousands)	PRIOR	FY 06-07	FY 07-08	FY 08-09	FY 09-10	FY 10-11	FY 11-12	FUTURE	TOTAL
<b>Revenue</b>									
Building Better Communities GOB Program	27,820	4,768	4,047	8,757	11,690	2,690	4,425	144,003	208,220
EPA Grant	0	1,000	1,380	1,500	0	0	0	0	3,880
Fire Hydrant Fund	10,331	2,472	2,498	2,523	2,549	2,576	2,602	2,629	28,180
Future WASD Revenue Bonds	0	0	0	497,786	0	0	457,111	379,748	1,334,645
Miscellaneous - Other County Sources	300	0	0	0	0	0	0	0	300
State Revolving Loan Wastewater Program	801	0	0	55,000	45,000	0	0	0	100,801
State Revolving Loan Water Program	52,830	0	0	0	0	0	0	0	52,830
WASD Revenue Bonds Sold	404,113	0	0	0	0	0	0	0	404,113
Wastewater Connection Charges	108,505	25,000	30,000	30,000	34,088	30,000	30,000	20,600	308,193
Wastewater Renewal Fund	87,644	36,000	36,000	54,000	54,000	54,000	54,000	54,000	429,644
Wastewater Special Construction Fund	5,707	0	0	0	0	0	0	0	5,707
Water Connection Charges	51,378	6,019	6,192	6,028	6,015	6,054	4,632	1,190	87,508
Water Renewal and Replacement Fund	102,370	24,000	24,000	36,000	36,000	36,000	36,000	36,000	330,370
Water Special Construction Fund	4,427	0	0	0	0	0	0	0	4,427
<b>Total:</b>	<b>856,226</b>	<b>99,279</b>	<b>104,117</b>	<b>691,594</b>	<b>189,342</b>	<b>131,320</b>	<b>588,770</b>	<b>638,170</b>	<b>3,298,818</b>
<b>Expenditures</b>									
<b>Strategic Area: Neighborhood And Unincorporated Area Municipal Services</b>									
Wastewater Projects	199,097	122,104	235,833	296,366	292,854	118,800	196,489	698,194	2,159,737
Water Projects	164,553	98,871	137,095	139,595	124,399	93,378	94,941	286,249	1,139,081
<b>Total:</b>	<b>363,650</b>	<b>220,975</b>	<b>372,928</b>	<b>435,961</b>	<b>417,253</b>	<b>212,178</b>	<b>291,430</b>	<b>984,443</b>	<b>3,298,818</b>



## **Business Environment**

The Department serves approximately 407,500 retail water customers and 322,500 retail wastewater customers. In addition, wholesale water services is provided to 15, and wholesale wastewater service to 12, of Miami-Dade County's 36 municipalities and wastewater services to Homestead Air Force Base. In terms of population, this represents about 2.2 million residents. The County continues to experience significant growth. The population in Miami-Dade County is anticipated to grow 6.8% from 2005 to 2010.

The following is a summary of the Department's Financial Environment:

- The Department serves the majority of the population of Miami-Dade County either as retail or wholesale customers. Limited exceptions include wholesale customers such as North Miami and Homestead along with certain other limited small service facilities. The Home Rule Amendment and Charter allow the Board of County Commissioners to exclusive rights to provide retail water and wastewater services and establish rates which have consistently been extremely competitive. In fact, MDWASD rates are among the lowest rates throughout the country.
- As a Department, MDWASD operates as an enterprise fund whereby all of its operational capital and administrative costs are funded through its customer rates and fees.
- During the FY 2005-06 budget hearings, the Board of County Commission established an annual adjustment to the Department's retail rates based on a "Maintenance Index", except when conditions demand the need for higher rate increases. Wholesale rates are to be adjusted annually, in accordance with the wholesale contracts which require that Department recover costs and capital requirements based on projected annual needs. Additionally, a "Smoothing Mechanism" is utilized to develop wholesale rates, which uses a three-year average percentage adjustment to fairly account for differences between projected and actual costs and minimize large single year rate increases.
- Other events affecting the Department include ongoing interest from various wholesale customers in having the Department take over their distribution and collection systems. The Department is currently evaluating the request from several municipalities.
- The FY 2006-07 Adopted Budget includes an adjustment to the retail rates of a 4.5% utilizing a "Maintenance Index" based on a 20-year historical average of the U.S. Department of Labor, Bureau of Labor Statistics, Consumer Price Index (CPI); the increase becomes effective on January 1, 2007. The bill for the average retail water and wastewater customer using 6,750 gallons per month will increase from \$30.98 in FY 2005-06 to \$32.37 per month in FY 2006-07; the rate increase will not affect retail lifeline and low-use customers. For wholesale rates, the Board approved a water rate increase for Hialeah and Miami Springs of \$0.0033 per thousand gallons, effective October 1, 2006. All other cities' rates for water and sewer remained the same.

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Wholesale rates were reviewed by an independent consultant selected by the Department and municipalities.

- The Department has more than \$1.6 billion of outstanding revenue bonds and loans that are rated as A1 or A+.
- The Department's FY 2006-07 Water and Wastewater Multi-Year Capital Improvement Plan includes funding for more than \$2.9 billion of future capital projects.
- The Department is considered a leader in the water and wastewater industry.
- Independent survey results indicate that customers are highly satisfied with the level of services provided by the Department. Customers are satisfied with the technology improvements for interacting with the Department, including the "On-line" bill payment option.

The following is a summary of the Department's Regulatory Environment:

- The Department's operations are regulated by the United States Environmental Protection Agency (USEPA), the Florida Department of Environmental Protection (FDEP), the Department of Health (DOH), and the Miami-Dade County Department of Environmental Resources Management (DERM). The allocation of water supply is regulated by the South Florida Water Management District (SFWMD).
- In the early nineties, the Department entered into two Consent Decrees with the USEPA and two Settlement agreements with the FDEP. The Department established the CD/SA Program to ensure compliance with these decrees and orders. The Department continues complying with these agreements and has completed 1506 milestones set forth in these enforcements actions and has not incurred any penalties as a result of not meeting these deadlines.
- On December 7, 1999, the Board of County Commissioners adopted Ordinance 99-165 that created the Cross-Connection Control / Backflow Prevention Program, and created Article VIII of Chapter 32 of the Miami-Dade County Code. This code section establishes requirements for backflow preventors' installation and empowers the Department to enforce these regulations.
- On July 22, 2003, the Board approved a new Consent Order (CO) entered into between the FDEP and the County, to address wastewater disposal at the South District Wastewater Treatment Plant (SDWWTP). The new CO requires upgrade of the treatment process to meet the high level disinfection (HLD) requirements in Chapter 62-600.440(5) Florida Administrative Code (FAC) and provides for expansion of the treatment and disposal capacity to meet future growth. The CO became effective on April 29, 2004. The Department has already completed 220 milestones.
- The CO also states that the FDEP agrees to work with the County to obtain funding for the improvements required by the Consent Order, in the form of low-interest loans. The FDEP has verbally committed to about \$100 million in loans, provided that the

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Department has an approved Wastewater Facilities Master Plan. For the next five years, the Department will be completing the design and construction of the facilities required under the CO.

- On November 25<sup>th</sup>, 2005, the USEPA published a new Underground Injection Control Program rule, which will impact the upgrade of the treatment at the SDWWTP. This rule requires the construction of HLD facilities by December 22, 2010. This schedule will not be met at the SDWWTP, since the anticipated completion of construction date is in late 2011. This rule also applies to the injection wells at the North District Wastewater Treatment Plant (NDWWTP). However, the Department has requested and FDEP has agreed to conduct a ground water study (GWS) at NDWWTP to demonstrate that there is no fluid movement from the injection system. If the GWS shows that there is no fluid movement, the plant will not have to be upgrade to meet HLD requirements.
- On January 4 and 5, 2006, the USEPA published two new major drinking water rules; the Stage 2 Disinfectants and Disinfection Byproducts Rule (DBPR) and the Long Term 2 Enhanced Surface Water Rule (LT2ESWTR), respectively. The Stage 2 DBPR purpose is to target and reduce long-term exposures to elevated levels of Disinfection Byproducts (DBPs) to address possible chronic health risks from cancer. The Department is in compliance with the Initial Distribution System Evaluations (IDSEs) required by this rule. The LT2ESWTR purpose is to improve control of microbial pathogens, specifically Cryptosporidium, for surface water systems. This rule will apply to the Hialeah/Preston Water Treatment Plants, if the rockmining lakes in the area of the Northwest wellfield (NWWF) cause surface water influences. The Department has assisted its wholesale customers with the compliance with the Stage 2 DBPR.
- In 2006, the Florida Legislature recognized the impact of rockmining in the area of the NWWF. A bill was passed that imposed a mitigation fee for each ton of limerock and sand sold, to upgrade the Hialeah/Preston WTPs; to meet the surface water treatment rule (LT2ESWTR) requirements. The WTPs upgrade fee imposed is 15 cents for each ton of limerock and sand sold, beginning on January 1, 2007. The collection of this fee will cease once the total amount of proceeds collected for this fee reaches the amount of the actual moneys necessary to design and construct the water treatment plant upgrade. The Department is conducting the preliminary planning for the design of these improvements.
- On November 8, 2006, the USEPA published the Ground Water Rule. The purpose of this rule is to provide for increased protection against microbial pathogens in public water systems that use ground water sources. MDWASD is developing and implementation plan for this new rule.
- In 2005, the Florida Legislature passed senate bills 444 and 360, which addressed alternative water supplies and growth management, respectively. Alternative water supplies include salt water; brackish, surface and groundwater; surface water captured predominately during wet-weather flows; sources made available through the addition of new storage capacity for surface or groundwater; reclaimed water; stormwater; and

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any other water supply source that is designated as nontraditional. Senate bill 444 provided for alternative water supply funding.

- In September 2005, the SFWMD Governing Board approved a policy to limit the use of the Biscayne Aquifer in the Lower East Coast to existing uses. The additional water needed to meet future demands will have to come from alternative water supplies. The SFWMD has initiated rule development to amend their rules to identify conditions for permit issuance for consumptive use permits for allocating water from the regional system, including Everglades, Water Conservation Areas, and the Biscayne Aquifer.
- On May 10, 2006, the County and the SFWMD entered into the Miami-Dade County Interim Consumptive Use Authorization and Agreement. This Agreement authorizes water supply for a period of 18 months to allow MDWASD to complete an alternative water supply plan and other regulatory information necessary to obtain a 20-year Consumptive Use Permit (CUP). The Department is in compliance with the agreement and 14 milestones have been completed. It is anticipated that the Department will have the 20-Year CUP in November 2007.
- In accordance with Florida statutes and regulations, the Department is required to prepare a reuse feasibility study as part of the application process to obtain a construction or operation permit for wastewater treatment plants. The Department has conducted a reuse feasibility study and a draft report was presented to the Infrastructure and Land Use Committee (INLUC) in May 2006. The INLUC directed the Department to forward the report the FDEP and the SFWMD for their comments. The Department has received comments from both agencies and its revising the report to be completed in December 2006.
- Ongoing Compliance of Federal Public Health Security and Bioterrorism Preparedness and Response Act / Risk Assessment Methodology for Water Systems/Reduction of Unacceptable Security Risks.

## **Customer Feedback Plan**

MDWASD conducted another Customer Satisfaction Survey that highlighted the excellent service provided by the Department. The survey was administered to 1,207 residential customers during September and October 2006.

Following are some of the responses:

- 92% of single family and 85% of multi-family customers are either very satisfied or satisfied with the reliability of water service
- 87% of single family and 81% of multi-family customers are either very satisfied or satisfied with the quality of water service
- 82% of single family and 69% of multi-family customers are either very satisfied or satisfied with the quality of sewer service
- 89% of single family and 83% of multi-family customers rated MDWASD as always or usually reliable and the most reliable utility as compared to the local phone company,

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natural gas, cellular phone, electric company, internet service provider or cable/satellite companies.

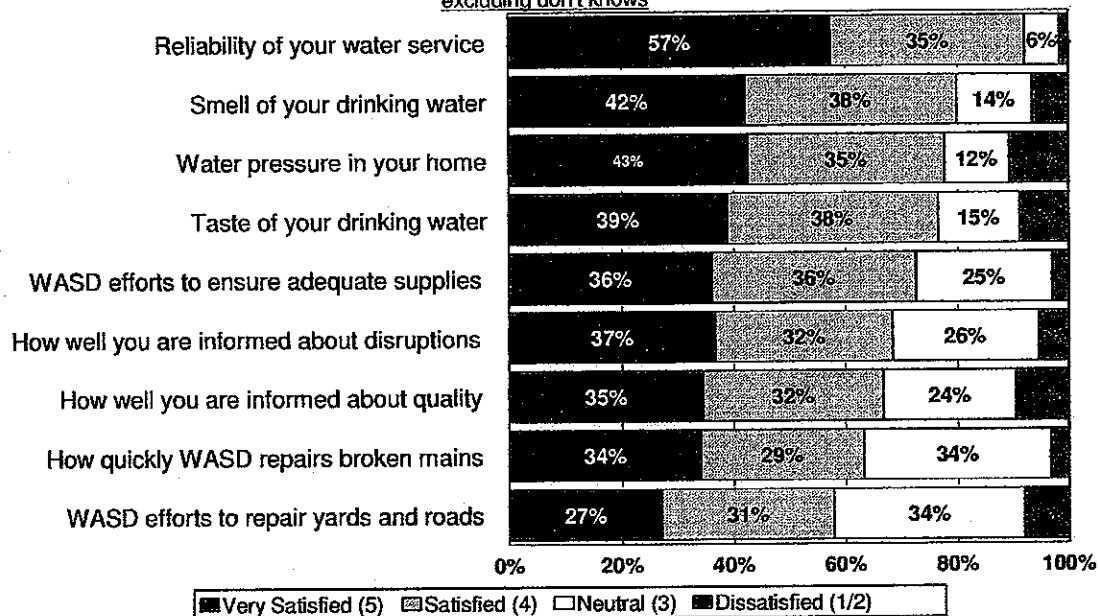
Of those residents who had used the various programs and services, almost all were satisfied. Some examples are:

- 80% satisfied with our 24-hour Communications Center
- 90% satisfied with public education on Showerhead Exchange Program
- 95% satisfied with pool credits

See the Satisfaction with various aspects of water services provided by the Single-Family Respondents illustrated below:

## Satisfaction with Various Aspects of WATER Service Single-Family Respondents

by percentage of respondents who rated the item as a 1 to 5 on a 5-point scale  
excluding don't knows



Source: ETC Institute Survey 2006

Another interesting trend is that although 75% of single family and 67% of multi-family customers still pay their water bill by mail, about 21% of single family and 14% of multi family residents currently pay their bill via the internet or through electronic payments. This information is critical in planning the department's outreach efforts to promote online and paperless billing. The internet is a growing tool for disseminating information to our customers and must be used to its maximum. Relying more heavily on the internet will also produce a reduction in mailing costs for the Department.

Two additional surveys are planned in FY06-07. One will target customers that have contacted the department for a customer service/billing issue and the other will address the needs of the wholesale customers. The responses to these surveys will provide the department with additional information as to how to improve service related issues and the

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relationship with the wholesale customers. The Department has planned the following outreach and education efforts.

**Outreach and Education**

- 69% of single family and 66% of multi-family customers had not read the Annual Water Quality Report. The information contained in this report is vital to the public's understanding of how safe and clean their drinking water is. Plans are to send the report as a separate mailer and provide not only information about water quality but of the department's efforts regarding alternative water supplies and future plans. Radio and newspaper advertising will be conducted prior to the mailing to advise residents to expect this valuable information.
- 35% of single family and 32% of multi-family customers are "not sure" if they are willing to pay an increase in fees to ensure that adequate supplies of drinking water are available to all County residents. Educating customers about the critical water situation in the community and how MDWASD is trying to balance costs and efficiencies for the benefit of the entire community is an important component of the outreach campaign.
- Ensuring the availability of water is a priority for the community. This topic ranked very high among respondents, 87% for single family and 82% for multi-family. Outreach efforts need to enforce the message that ensuring the availability of water equals higher costs and ultimately higher rates.
- Only 21% of single family and 17% of multi-family residences read the inserts that come with the water bill "all of the time." This is important to realize when we have a message that needs to go out to all of our customers. Additional outreach efforts will include the MDWASD website, newspaper and radio advertising and other methods to get our message out to residents.
- The outreach and education of online bill pay, paperless billing and water awareness/conservation issues will continue to be part of the department's outreach and education campaign as they are priorities for the community.